

TERM 3
Model question 3 T3
7th Standard

Maths

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 03:20:00 Hrs

Total Marks : 100

Part-A

2 x 1 = 2

- 1) Three times the difference of x and y
(a) $3x - y$ (b) $3 - x - y$ (c) $xy - 3$ (d) $3(y - x)$
- 2) 2 less than the product of y and z
(a) $2 - yz$ (b) $2 + yz$ (c) $yz - 2$ (d) $2y - z$

Part-B

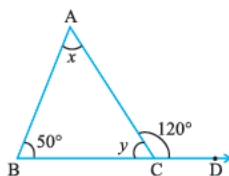
4 x 2 = 8

- 3) Write the algebraic expressions for the following:
Twice the sum of m and n.
- 4) Write the algebraic expressions for the following:
b decreased by twice a.
- 5) Write the algebraic expressions for the following:
Numbers x and y both squared and added.
- 6) Write the algebraic expressions for the following:
Product of p and q added to 7.

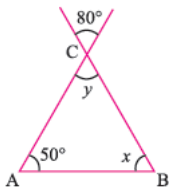
Part-C

30 x 3 = 90

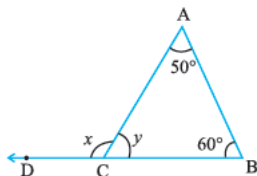
- 7) Find the values of the unknown x and y in the following diagrams:



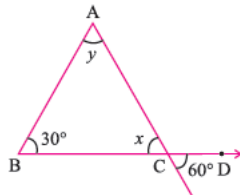
- 8) Find the values of the unknown x and y in the following diagrams:



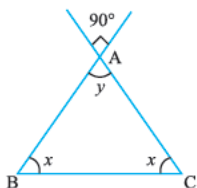
- 9) Find the values of the unknown x and y in the following diagrams:



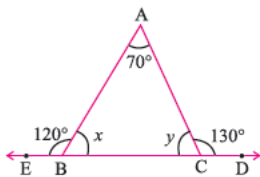
- 10) Find the values of the unknown x and y in the following diagrams:



- 11) Find the values of the unknown x and y in the following diagrams:



- 12) Find the values of the unknown x and y in the following diagrams:



- 13) Three angles of a triangle are $x + 5^\circ$, $x + 10^\circ$ and $x + 15^\circ$ find x .
- 14) Construct the triangles for the following given measurements.
Construct $\triangle PQR$, given that $PQ = 6\text{cm}$, $QR = 7\text{cm}$, $PR = 5\text{cm}$.
- 15) Draw a triangle DEF such that $DE = 4.5\text{cm}$, $EF = 5.5\text{cm}$ and $DF = 4.5\text{cm}$. Can you identify the type of the triangle? Write the name of it.
- 16) Construct an equilateral triangle with the side 7cm . Using protector measure each angle of the triangle. Are they equal?
- 17) Construct the triangles for the following given measurements.
Construct $\triangle XYZ$, given that $YZ = 7\text{cm}$, $ZX = 5\text{cm}$, $\angle Z = 50^\circ$.
- 18) Construct the triangles for the following given measurements.
Construct $\triangle PQR$ when $PQ = 6\text{cm}$, $PR = 9\text{cm}$ and $\angle P = 100^\circ$.
- 19) Construct the triangles for the following given measurements.
Construct $\triangle ABC$ given that $AB = 6\text{cm}$, $BC = 8\text{cm}$ and $\angle B = 90^\circ$ measure length of AC .
- 20) Construct the triangles for the following given measurements.
Construct $\triangle XYZ$, when $\angle X = 50^\circ$, $\angle Y = 70^\circ$ and $XY = 5\text{cm}$.
- 21) Construct the triangles for the following given measurements.
Construct $\triangle ABC$ when $\angle A = 120^\circ$, $\angle B = 30^\circ$ and $AB = 7\text{cm}$.
- 22) Construct the triangles for the following given measurements.
Construct $\triangle LMN$, given that $\angle L = 40^\circ$, $\angle M = 40^\circ$ and $LM = 6\text{cm}$. Measure and write the length of sides opposite to the $\angle L$ and $\angle M$. Are they equal? What type of Triangle is this?
- 23) The marks in mathematics of 10 students are 56, 48, 58, 60, 54, 76, 84, 92, 82, 98. Find the range and arithmetic mean
- 24) The weights of 5 people are 72 kg, 48 kg, 51 kg, 69 kg, 67 kg. Find the mean of their weights.
- 25) Two vessels contain 30 liters and 50 liters of milk separately. What is the capacity of the vessels if both share the milk equally?
- 26) The maximum temperature in a city on 7 days of a certain week was 34.8°C , 38.5°C , 33.4°C , 34.7°C , 35.8°C , 32.8°C , 34.3°C . Find the mean temperature for the week.
- 27) The mean weight of 10 boys in a cricket team is 65.5 kg. What is the total weight of 10 boys
- 28) Find the median of the following data.
6, 14, 5, 13, 11, 7, 8
- 29) The weight of 7 chocolate bars in grams are
131, 132, 125, 127, 130, 129, 133. Find the median
- 30) The runs scored by a batsman in 5 innings are 60, 100, 78, 54, 49. Find the median
- 31) Find the median of the first seven natural numbers
- 32) Pocket money received by 7 students is given below. Rs.42, Rs.22, Rs.40, Rs.28, Rs.23, Rs.26, Rs.43. Find the median
- 33) Find the mode of the given data. 3, 4, 3, 5, 3, 6, 3, 8, 4.
- 34) Twelve eggs collected in a farm have the following weights.
32 gm, 40 gm, 27 gm, 32 gm, 38 gm, 45 gm,
40 gm, 32 gm, 39 gm, 40 gm, 30 gm, 31 gm, Find the mode of the above data.
- 35) Find the mode of the following data.
4, 6, 8, 10, 12, 14
- 36) Find the mode of the following data.
12, 14, 12, 16, 15, 13, 14, 18, 19, 12, 14, 15, 16, 15, 16, 16,
15, 17, 13, 16, 16, 15, 13, 15, 17, 15, 14, 15, 13, 15, 14.
